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(54) Title: METHOD FOR THE EVALUATION OF VELVET ANTLER

(57) Abstract: The invention provides a method and apparatus using infrared thermography for predicting an unknown value of an internal composition characteristic of velvet antler in vivo, in vitro, and/or during cooling or warming. The method involves generating a predictive model using a sample population of antlers to determine a relationship between a known input variable and a known value for the composition characteristic; and using the predictive model to predict the unknown value of the same composition characteristic in an antler not selected from the sample population. Using this value, a map can be made to identify sites and levels of the composition characteristic within the antler. The invention provides a method for predicting an internal composition characteristic of a velvet antler by obtaining an infrared thermographic image of the antler and visually ranking the image by comparison to a corresponding-image of an antler with the desired composition characteristic. A method to predict maturity by comparing temperature differences between the antler's tip and base is provided.



### INTERNATIONAL SEARCH REPORT



Relevant to claim No.

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G01J5/48

C. DOCUMENTS CONSIDERED TO BE RELEVANT

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 - 601N - 601J

Category o Citation of document, with indication, where appropriate, of the relevant passages

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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EPO-Internal, WPI Data, PAJ, BIOSIS, EMBASE, MEDLINE, SCISEARCH

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later	than the priority date claimed		per of the same patent		
Date of the	actual completion of the international search	Date of mailing	of the international sea	arch report	
3	30 January 2004	19/02/	/2004		
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	NL – 2280 HV Rijswijk	1			

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Intentional Application No PCT/CA-03/00334

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